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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,772	02/08/2006	Makoto Katsu	3.0-041	1810

7590 04/11/2007  
Michael E Zall  
Two Yorkshire Drive  
Suffern, NY 10901

EXAMINER
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REIS, TRAVIS M

ART UNIT	PAPER NUMBER
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2859

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/11/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/550,772

Applicant(s)

KATSU ET AL.

Examiner

Travis M. Reis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 6 and 8-12 is/are rejected.
- 7) ☒ Claim(s) 4 and 7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 March 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____                                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20070108</u> .  | 6) <input type="checkbox"/> Other: ____                           |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: C3. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

2. Claims 1-8 are objected to because of the following informalities:

Claim 1 recites the limitation "the shape" in line 2; "the angle of inward/outward inclination" in line 8; "the angle of inclination" in lines 8-9. There is insufficient antecedent basis for these limitations in the claim.

Claim 2 recites the limitation "the shape" in line 2; "the angle of inward/outward inclination" in line 7; "the angle of inclination" in lines 7-8; "the inward/outward inclination" in line 10. There is insufficient antecedent basis for these limitations in the claim.

Claim 3 recites the limitation "the rate of arch height" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 4 recites the limitation "the angle of inward inclination" in line 3. There is insufficient

antecedent basis for these limitations in the claim.

Claim 5 recites the limitation "the shape" in line 3; "the angle of inward/outward inclination" in line 8; "the angle of inclination" in lines 8-9; "the shape of a sole" in line 10; "the inward/outward inclination" in line 13. There is insufficient antecedent basis for these limitations in the claim.

Claim 6 recites the limitation "the rate of arch height" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 7 recites the limitation "the angle of inward inclination" in line 3. There is insufficient antecedent basis for these limitations in the claim.

Claim 8 recites the limitation "the shape" in line 2; "the angle of inward/outward inclination" in line 8. There is insufficient antecedent basis for these limitations in the claim.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, 5, 6, & 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Kouchi et al. ("Relation between the medial axis of the foot outline and 3-D foot shape", Ergonomics).

Kouchi et al. discloses a foot inclination angle measuring method, system, & shoe liner manufacturing/selection method (Abstract), comprising the steps of measuring the shape of a human foot in three dimensions (Figure 1); based on three-dimensional data on the measured shape of the foot, obtaining a two-dimensional cross section (Figure 6) of the foot orienting in a front-rear direction, which includes a cross section of a heel of the foot; obtaining a central line (MLI) of the two-dimensional cross section in a right-left direction; and obtaining the angle of inward/outward inclination of the foot from the angle of inclination of the central line (page 857,

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lines 7-11); furthermore obtaining the rate of arch height (PFA) of the foot from the three-dimensional data on the measured shape of the foot (page 859, lines 19-29 to page 860 lines 1-10); and based on the obtained foot inward/outward inclination angle, the obtained foot arch height rate, selecting a fitting shoe liner from among multiple types of previously prepared shoes or shoe sock liners for correcting the inward/outward inclination and flatness of the foot (page 861 lines 5-8; liners 33-37).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kouchi et al.

Kouchi et al. discloses all of the instant claimed invention as stated above in the rejection of claims 1-6, but does not disclose the two-dimensional cross sections shown in Figure 4 are in a position ahead of a rearmost end of the foot by a range of distance of not less than 4% nor more than 11% of the length of the foot. However, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide such a cross section at a distance in the range of 4% to 11% of the length of the foot, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the "optimum range" involves only routine skill in the art. *In re Aller*, 105 USPQ 233. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to take a cross section of the foot at 4% to 11% of the length of the foot to get a proper sample of data.

7. Claims 4 & 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kouchi et al. in view of Tiitola et al. (U.S. Patent 4917105).

Kouchi et al. discloses all of the instant claimed invention as stated above in the rejection of claims 1-6, but does not disclose the step of obtaining the angle of inward inclination of a first toe of the foot from three-dimensional data on the measured shape of the foot & based on said information selecting a fitting shoe or shoe sock liner and correcting hallux valgus of the foot.

Tiitola et al. discloses a foot testing method which includes the step of obtaining the angle of inward inclination of a first toe (80) of the foot based on the measured shape of the foot (Figure 1) & based on said information selecting a fitting shoe or shoe sock liner and correcting hallux valgus of the foot (Figure 2)(col. 4 lines 58-60; col. 6 lines 28-38). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to add the step of taking the data of the first toe of the foot as taught by Tiitola et al. in the method disclosed by Kouchi et al. in order to get a more extensive picture of the foot to more accurately pick the correct fitting shoe or shoe sock liner.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Camcho et al. discloses a three-dimensional anatomically detailed foot model (Journal of Rehabilitation Research and Development).. Mead discloses a method for making an impression (U.S. Patent 2472754). Cohen et al. discloses a shoe-size indicating apparatus (U.S. Patent 3457647). Borgeas discloses a therapeutic personalizable health shoe (U.S. Patent 3990159). Herbert et al. discloses a method for correcting gait (U.S. Patent 4784143). White et al. discloses a foot sizing method (U.S. Patent 5231723). Whittlesey et al. discloses an apparatus for laser measurement of an object (U.S. Patent 5671055). Glennie et al. discloses a foot orthoses (U.S. Patent 5800364). Brown et al. discloses a foot analyzer (U.S. Patent 6331893). Martindale discloses a system for foot assessment (U.S. Patent App. Pub. 20040193075). Hartford discloses

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a three-dimensional template (U.S. Patent 6925723). Brooks discloses a foot scanning method (U.S. Patent 7051452). Spivey discloses an apparatus for fitting shoes (U.S. Patent 7086168).


9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Travis M. Reis whose telephone number is (571) 272-2249. The examiner can normally be reached on 8--5 M--F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on (571) 272-2245. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Travis M Reis  
Examiner  
Art Unit 2859

tmr  
April 2, 2007



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